

ABSTRACT OF THE DISCLOSURE

A thermal nitride film is formed as a gate insulating film on a silicon substrate, and after a gate electrode material is formed on the insulating film, it is patterned to form gate electrodes. After processing the electrodes, part of the gate insulating film other than a portion thereof which lies under the gate electrodes is removed. Further, an insulating film (a post oxidation film) is formed on side walls and upper surfaces of the stacked gate structures and the exposed main surface of the silicon substrate by use of thermal oxidation method.